

Applicant : Owen, et al.  
Serial No: : 09/719,889  
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Attorney's Docket 12724-002001 / 30347USP00



### REMARKS

Claims 3, 4, 6, 7, 8, 10, 11, 15, 17, 19, 21, 22, 25, and 27 have been amended to comply with U.S. patent law and practice and/or to correct grammatical errors. Claim 18 has been amended to recite a mixture of biomolecules and solvent wherein the amount of biomolecules can be up to 80%w/w and the amount of solvent can be up to 60%w/w. Support for this amendment can be found, *inter alia*, on page 7, lines 25-27. Accordingly, Applicants submit no new matter has been introduced by the present amendment.

Attached is a marked-up version of the changes being made by the current amendment.

Applicants ask that all claims be examined. Enclosed is a \$212.00 check for excess claim fees. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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Version with markings to show changes made

In the claims:

Claims 3, 4, 6, 7, 8, 10, 11, 15, 17, 18, 19, 21, 22, 25 and 27 have been amended as follows:

3. A solder according to claim 2 wherein the protein is any one [or more] of an albumin, an elastin, a collagen, [and] a fibrinogen, or any combination thereof.

4. A solder according to [any one of the preceding claims] claim 1, further comprising a dye for improving energy deposition into the solder when the solder is exposed to energy.

6. A solder according to [any one of the preceding claims] claim 1, further comprising an adjuvant for promoting rapid or more complete tissue healing.

7. A solder according to claim 6 wherein the adjuvant is a growth factor, a sodium hyaluronate, a hormone or an anti-coagulant.

8. A solder according to [any one of the preceding claims] claim 1, further comprising a material for improving the strength of the solder.

10. A kit comprising a solder according to any one of [the preceding] claims 1 to 9.

11. A method of preparing a biomolecular solder, the method comprising the following steps:

- (a) forming a substantially solid composition comprising biomolecules and a solvent;
- (b) denaturing the biomolecules in the composition; and

(c) drying the composition to form [the] a solder; wherein in step (b), the biomolecules are denatured so that, in use, the solubility of the solder is reduced.

15. A method according to claim 14 wherein the composition is heated in a hot liquid bath or in [pressurised] pressurized steam.

17. A method according to claim 11 wherein in step (a), the substantially solid composition is formed by mixing the biomolecules with [a] the solvent in amounts which are sufficient to allow the substantially solid composition to form.

18. A method according to claim 17 wherein the biomolecules and the solvent are mixed in amounts of up to 80%w/w and up to [20] 60%w/w, respectively.

19. A method according to claim 11 wherein in step (a), a dye for improving energy deposition[,] into the solder is added to the substantially solid composition.

21. A method according to claim 20 wherein the dye is mixed with the solvent[,] prior to mixing the solvent with the biomolecules.

22. A method according to claim 11 wherein in step (c), [drying] the composition to form the solder [removes] is dried to remove all of the solvent from the solder.

25. A method according to claim 24 wherein the structure is a mesh, a stiffener or a graft material.

27. A method of repairing a biological tissue, the method comprising the following steps:

(a) applying a solder according to claim 1 to the site of a tissue to be repaired;  
and

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(b) exposing the solder to energy for a time sufficient to allow the solder to bond to the tissue [on that the tissue is] to be repaired.